



**STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
COOKEVILLE ENVIRONMENTAL FIELD OFFICE**

**DIVISION OF WATER POLLUTION CONTROL**

**1221 SOUTH WILLOW AVENUE**

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July 27, 2010

Certified Mail

91 7108 2133 3937 2540 4998

**Crab Orchard Utility District**

Mr. Gerald Williams  
Water Plant Superintendent  
2089 E. First Street  
Crossville, Tennessee 38555

**RE: Compliance Evaluation Inspection  
Otter Creek Reservoir– Crab Orchard Utility District, NPDES # TN0067831  
Cumberland County, Permit Expiration: September 27<sup>th</sup>, 2009**

Dear Mr. Williams:

On July 21<sup>st</sup>, 2010, the Division of Water Pollution Control (WPC) conducted a Compliance Evaluation Inspection (CEI) at the Crab Orchard Utility District's water supply lake, Otter Creek Reservoir (Stone Lake). The purpose of the CEI was to determine the reliability of data submitted on the Discharge Monitoring Reports (DMRs), and to review the operation of the Filter Backwash and Sedimentation Basins. This letter serves as a CEI report. The discharge is ultimately to the Otter Creek Reservoir.

**Permit, Records, and Self-Monitoring Data**

The Crab Orchard Utility District, (COUD), backwash water treatment facility is operating under a permit issued in October 2004. The permit and laboratory records were readily available for review at the facility. DMR(s) were correct and complete for the operational details of the treatment plant. The aluminum test is being determined by a Hach instrument. This method is not approved for wastewater and the facility will need to contact their contract laboratory in order to meet the conditions of the approved method. The chlorine test will be for Total Residual Chlorine, (TRC). The free chlorine test does not meet the NPDES permit requirement.

### **Water Treatment Plant and Laboratory**

The water treatment plant was inspected and found to be clean and well kept. The treatment system related to regulation by Water Pollution Control consists of two sedimentation basins. The sedimentation basins are operating very well. The basins are in series. The basins were recently cleaned. The final effluent from the second or final basin was very clear. Charcoal was present in the first lagoon. The charcoal is being used to improve the taste and odor of the finished water.

### **Flow Measurement**

The operator measures the flow using backwash flow pump rates. Flow proportional sampling is not required.

### **Complaints**

No complaints have been received.

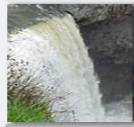
The Division of Water Pollution Control would like to thank facility staff for their time and courtesy during the plant inspection.

Sincerely,

Wm. Oakley Hall  
Environmental Specialist  
Division of Water Pollution Control  
Cookeville Environmental Field Office

Enclosures: EPA 3560 Form; Site Photographs

cc: Cookeville EFO, Cumberland County file  
Vojin Janjic, WPC, Nashville Central Office - Permitting  
Rob Howard, WPC Field Office Manager, Cookeville EFO  
Johnny Walker, DWS Field Office Manager, Cookeville EFO



Tennessee Department of Environment  
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Crab Orchard Utility District  
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7-21-10

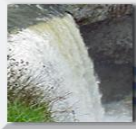


Influent to the second basin during a backwash cycle is pictured. Note the black tint from the charcoal additive.



The second basin's effluent was clear. The pond was recently cleaned of sediment. Note the piles of recently excavated soil beside the basin.





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Otter Creek Reservoir, the receiving stream.